IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. – 18. (Cancelled)

19. (Original) A method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising the steps of:

acquiring a pilot signal prior to the user terminal entering the building;

placing the user terminal into a deep paging mode prior to the user terminal entering the building;

tracking Doppler as the user terminal proceeds into the building; and

monitoring an auxiliary paging channel after activating said deep paging mode.

20. (Original) The method of claim 19, wherein paging channel messages transmitted over said auxiliary paging channel are combined with a Walsh sequence having a length greater than or equal to 128 chips.

21. (Original) The method of claim 19, further comprising the step of acquiring an auxiliary synchronization signal.

22. (Original) The method of claim 19, further comprising the step of acquiring an auxiliary pilot signal.

23. (Original) The method of claim 22, wherein paging channel messages transmitted over said auxiliary paging channel are transmitted at a data rate of less than 4800 bits per second.

24. (Original) A method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising the steps of:

receiving at the user terminal ephemeris messages transmitted from a gateway; storing in the user terminal said ephemeris messages;

determining the location of the user terminal;

determining Doppler based on said location and said ephemeris messages stored in the user terminal; and

acquiring a pilot signal.

25. (Original) The method of claim 24, wherein said step of determining the location of the user terminal includes the step of storing the location of the user terminal each time the user terminal registers with a gateway.

26. (Original) The method of claim 24, wherein said step of determining the location of the user terminal includes the step of receiving a global positioning system (GPS) signal.

27. (New) The method of claim 19, wherein the monitoring occurs based on the Doppler tracked by the user terminal.

28. (New) The method of claim 24, wherein the acquiring occurs based on the Doppler determined by the user terminal.

29. (New) At least one processor configured for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising:

a first module for acquiring a pilot signal prior to the user terminal entering the building;

a second module for placing the user terminal into a deep paging mode prior to the user terminal entering the building;

a third module for tracking Doppler as the user terminal proceeds into the building; and

a fourth module for monitoring an auxiliary paging channel after activating the deep paging mode.

30. (New) An apparatus for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising:

means for acquiring a pilot signal prior to the user terminal entering the building;

means for placing the user terminal into a deep paging mode prior to the user terminal entering the building;

means for tracking Doppler as the user terminal proceeds into the building; and

means for monitoring an auxiliary paging channel after activating the deep paging mode.

31. (New) A user terminal for compensating for the Doppler effect in a communication system, comprising:

at least one receiver operable to acquire messages, transmitted at a low data rate, inside a building, wherein the at least one receiver is further operable to acquire a pilot signal prior to the user terminal entering the building;

a control processor in communication with the at least one receiver; and

baseband circuitry in communication with the at least one receiver and operable by the control processor to place the user terminal into a deep paging mode prior to the user terminal entering the building, wherein the baseband circuitry is further operable to track Doppler as the user terminal proceeds into the building, and wherein the baseband circuitry is further operable to monitor an auxiliary paging channel after activating the deep paging mode.

32. (New) The user terminal of claim 31, wherein the at least one receiver is further operable to acquire paging channel messages transmitted over the auxiliary paging channel, and wherein the baseband circuitry is further operable to combine the paging channel messages with a Walsh sequence having a length greater than or equal to 128 chips.

33. (New) The user terminal of claim 31, wherein the at least one receiver is further operable to acquire an auxiliary synchronization signal.

34. (New) The user terminal of claim 31, wherein the receiver is further operable to acquire an auxiliary pilot signal.

35. (New) The user terminal of claim 34, wherein the at least one receiver is further operable to acquire paging channel messages transmitted over the auxiliary paging channel, and wherein the paging channel messages are transmitted at a data rate of less than 4800 bits per second.

36. (New) The user terminal of claim 31, wherein the monitoring of the auxiliary paging channel performed by the baseband circuitry is further operable to occur based on the tracked Doppler.

37. (New) At least one processor configured for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising:

a first module for receiving at the user terminal ephemeris messages transmitted from a gateway; storing in the user terminal the ephemeris messages;

a second module for determining the location of the user terminal;

a third module for determining Doppler based on the location and the ephemeris messages stored in the user terminal; and

a fourth module for acquiring a pilot signal.

38. (New) An apparatus configured for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising:

means for receiving at the user terminal ephemeris messages transmitted from a gateway; storing in the user terminal the ephemeris messages;

means for determining the location of the user terminal;

means for determining Doppler based on the location and the ephemeris messages stored in the user terminal; and

means for acquiring a pilot signal.

39. (New) A user terminal for compensating for the Doppler effect in a communication system, comprising:

at least one receiver operable to acquire messages, transmitted at a low data rate, inside a building, the at least one receiver further operable to acquire ephemeris messages transmitted from a gateway;

a memory in communication with the at least one receiver and operable to store the ephemeris messages;

a control processor in communication with the at least one receiver and the memory;

baseband circuitry in communication with the at least one receiver and the memory and operable by the control processor to determine the location of the user terminal, wherein the baseband circuitry is further operable to determine Doppler based on the location and the ephemeris messages, and wherein the baseband circuitry and the at least one receiver are further operable to acquire a pilot signal.

40. (New) The user terminal of claim 39, wherein the baseband circuitry is further operable to initiate storing the location of the user terminal in the memory each time the user terminal registers with a gateway.

41. (New) The user terminal of claim 39, wherein the determining of the location of the user terminal by the baseband circuitry further comprises the at least one receiver being further operable to receive a global positioning system (GPS) signal.

42. (New) The user terminal of claim 39, wherein the baseband circuitry and the at least one receiver are further operable to acquire the pilot signal based on the Doppler determined by the baseband circuitry.